Speedometer Vehicle Speed Sensor Troubleshooting - New Beetle

CHECKING SPEEDOMETER VEHICLE SPEED SENSOR (VSS) -G22-

Required for troubleshooting:

- Multimeter Fluke 83
- Connector Kit VW 1594
- Valid wiring diagram
- Appropriate Electrical Equipment article.

Always check battery Ground (GND) connections for tight fit before troubleshooting

CAUTION: DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Always use connector test kit VW 1594 to make the necessary electrical connections.

Prerequisite:

Instrument cluster coding MUST correspond to model and equipment particulars. Check/confirm instrument cluster coding.

- For vehicles up to 06.99, see **INSTRUMENT CLUSTER, CODING (FUNCTION 07)** .
- For vehicles from 06.99 to 10.00, see **INSTRUMENT CLUSTER UP TO 10.00 MODELS, CODING FUNCTION (07)** .
- For vehicles from 10.00 and up, see **INSTRUMENT CLUSTER FROM 10.00 MODELS, CODING FUNCTION (07)** .

Preparation:

- Switch OFF ignition and all electrical consumers.
- Remove driver's side lower instrument panel cover. See **INSTRUMENT PANEL** .

NOTE: Up to June 1999, speedometer vehicle speed sensor is located at the rear of the transmission. From June 1999, speedometer vehicle speed sensor is located in the area of the left-hand drive shaft flange on manual and automatic gearbox vehicles.

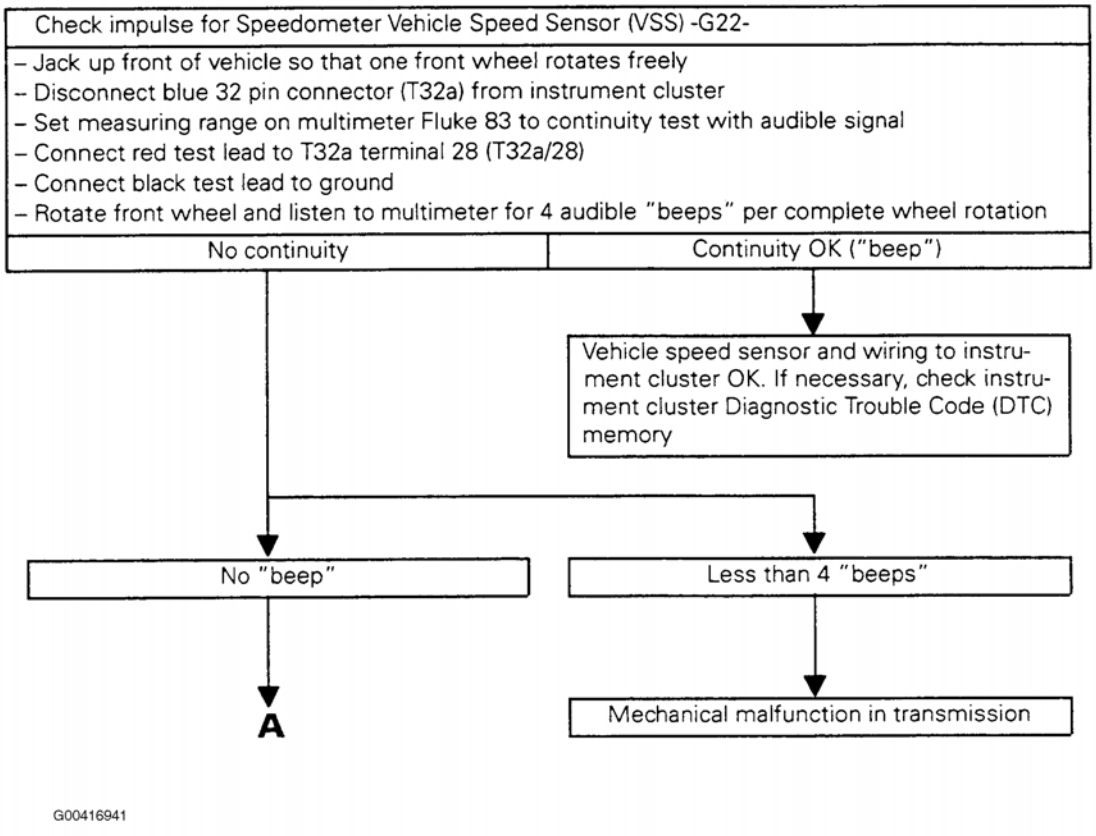
Check impulse for Speedometer Vehicle Speed Sensor (VSS) -G22-
– Jack up front of vehicle so that one front wheel rotates freely
– Disconnect blue 32 pin connector (T32a) from instrument cluster
– Set measuring range on multimeter Fluke 83 to continuity test with audible signal
– Connect red test lead to T32a terminal 28 (T32a/28)
– Connect black test lead to ground
– Rotate front wheel and listen to multimeter for 4 audible "beeps" per complete wheel rotation
No continuity
Continuity OK ("beep")
Vehicle speed sensor and wiring to instrument cluster OK. If necessary, check instrument cluster Diagnostic Trouble Code (DTC) memory
No "beep"
Less than 4 "beeps"
A
Mechanical malfunction in transmission
G00416941

Fig. 1: Speedometer Vehicle Speed Sensor Troubleshooting (1 Of 2)
Courtesy of VOLKSWAGEN UNITED STATES, INC.

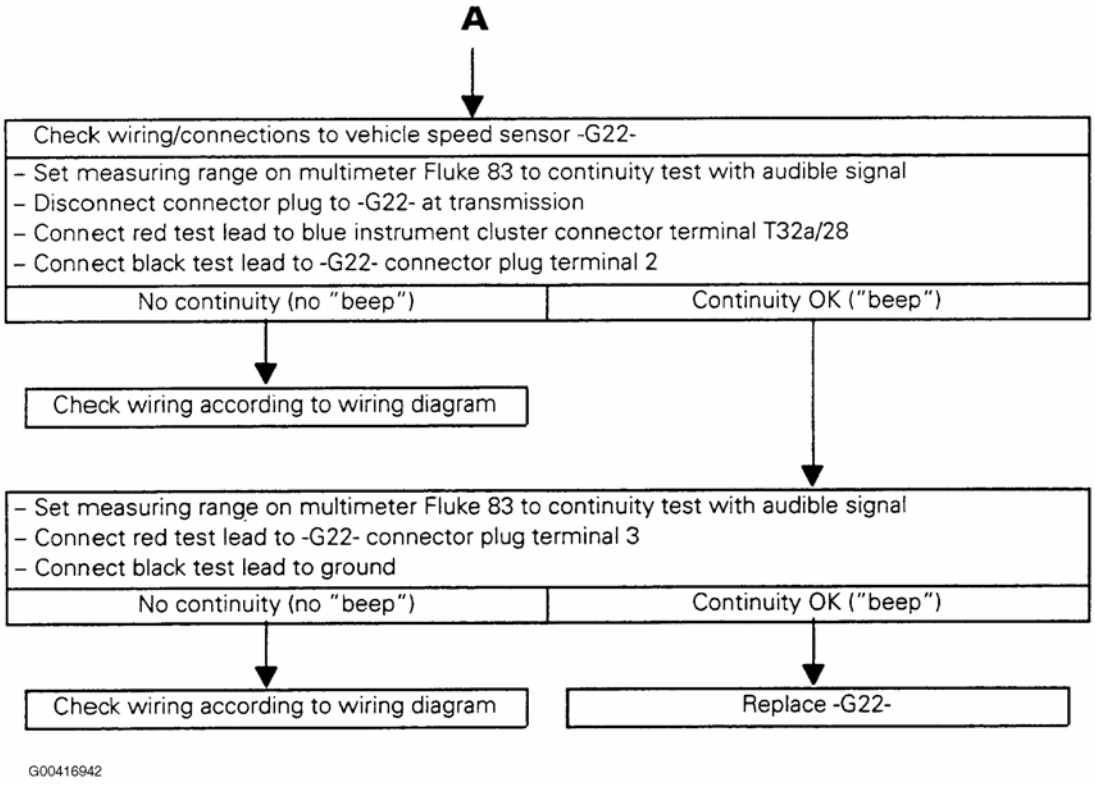
A
Check wiring/connections to vehicle speed sensor -G22-
– Set measuring range on multimeter Fluke 83 to continuity test with audible signal
– Disconnect connector plug to -G22- at transmission
– Connect red test lead to blue instrument cluster connector terminal T32a/28
– Connect black test lead to -G22- connector plug terminal 2
No continuity (no "beep")
Continuity OK ("beep")
Check wiring according to wiring diagram
– Set measuring range on multimeter Fluke 83 to continuity test with audible signal
– Connect red test lead to -G22- connector plug terminal 3
– Connect black test lead to ground
No continuity (no "beep")
Continuity OK ("beep")
Check wiring according to wiring diagram
Replace -G22-
G00416942

Fig. 2: Speedometer Vehicle Speed Sensor Troubleshooting (2 Of 2)
Courtesy of VOLKSWAGEN UNITED STATES, INC.